

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/010584

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K16/24 C07K16/28 A61P37/00 A61K39/395

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>EP 1 108 435 A (CHUGAI PHARMACEUTICAL CO LTD) 20 June 2001 (2001-06-20)</p> <p>column 1, paragraph 7</p> <p>column 2, paragraph 10 – column 3, paragraph 21</p> <p>column 4, paragraph 27 – paragraph 29</p> <p>column 5, paragraph 37</p> <p>column 9, paragraph 60 – column 10, paragraph 68</p> <p>column 13, paragraph 84 – paragraph 86</p> <p>examples 2-4</p> <p>claims</p> <p>-----</p> <p style="text-align: center;">-/-</p>	1-15

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

22 November 2004

Date of mailing of the international search report

17/12/2004

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INTERNATIONAL SEARCH REPORT

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al Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 983 767 A (CHUGAI PHARMACEUTICAL CO LTD) 8 March 2000 (2000-03-08) column 2, paragraph 10 - column 3, paragraph 23 column 7, paragraph 45 - column 13, paragraph 85 column 16, paragraph 97 - column 18, paragraph 107 column 19, paragraph 113 - paragraph 116 examples 2-4 claims -----	1-15
X	EP 1 334 731 A (CHUGAI PHARMACEUTICAL CO LTD) 13 August 2003 (2003-08-13) page 1, paragraph 11 - page 2, paragraph 27 page 6, paragraph 58 - paragraph 65 page 7, paragraph 77 - page 8, paragraph 88 page 9, paragraph 97 - paragraph 101 claims; examples -----	1-15
X	EP 1 074 268 A (KISHIMOTO TADAMITSU ;CHUGAI PHARMACEUTICAL CO LTD (JP)) 7 February 2001 (2001-02-07) page 3, paragraph 26 - page 4, paragraph 33 page 6, paragraph 59 - page 7, paragraph 72 page 8, paragraph 80 - paragraph 87 page 11, paragraph 122 - paragraph 126 claims; examples -----	1-15
X	WO 98/36061 A (FERGUSON MARK WILLIAM JAMES ;KANE SHARON O (GB); UNIV MANCHESTER ()) 20 August 1998 (1998-08-20) page 1, line 1 - page 3, line 13 page 6, line 1 - line 27 page 10, line 1 - page 11, line 14 page 15, line 14 - line 24 claims; examples -----	1-15
X	US 5 856 135 A (TSUCHIYA MASAYUKI ET AL) 5 January 1999 (1999-01-05) column 1, line 1 - line 65 claims; examples -----	1-15
X	EP 0 617 126 A (AJINOMOTO KK) 28 September 1994 (1994-09-28) page 2, line 1 - line 8 page 3, line 24 - line 54 claims; examples -----	1-15
		-/-

INTERNATIONAL SEARCH REPORT

Inten Application No
PCT/EP2004/010584

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/001663 A1 (KISHIMOTO TADAMITSU ET AL) 24 May 2001 (2001-05-24) page 1, paragraph 2 page 2, paragraph 23 - paragraph 30 page 3, paragraph 36 - page 4, paragraph 51 claims; examples -----	1-15
X	US 5 888 510 A (KISHIMOTO TADAMITSU ET AL) 30 March 1999 (1999-03-30) column 2, line 43 - column 3, line 13 column 3, line 40 - column 4, line 2 column 6, line 9 - line 55 claims; examples -----	1-15
X	MIHARA M ET AL: "IL-6 receptor blockage inhibits the onset of autoimmune kidney disease in NZB/W F1 mice" CLINICAL AND EXPERIMENTAL IMMUNOLOGY, OXFORD, GB, vol. 112, no. 3, June 1998 (1998-06), pages 397-402, XP002179019 ISSN: 0009-9104 page 397 - page 402 -----	1-15
X	MIHARA M ET AL: "HUMANIZED ANTIBODY TO HUMAN INTERLEUKIN-6 RECEPTOR INHIBITS THE DEVELOPMENT OF COLLAGEN ARTHRITIS IN CYNOMOLGUS MONKEYS" CLINICAL IMMUNOLOGY, ACADEMIC PRESS, US, vol. 98, no. 3, March 2001 (2001-03), pages 319-326, XP001069970 ISSN: 1521-6616 page 329 - page 326 -----	1-15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2004/010584

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 13 because they relate to subject matter not required to be searched by this Authority, namely:

Although claim 13 is directed to a method of treatment of the human body (Article 52(4) EPC), the search has been carried out and based on the alleged effects of the composition.
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

 Inter alia Application No
PCT/EP2004/010584

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP 1108435	A 20-06-2001	AU 757261 B2 AU 5304999 A CA 2341239 A1 EP 1108435 A1 WO 0010607 A1		13-02-2003 14-03-2000 02-03-2000 20-06-2001 02-03-2000
EP 0983767	A 08-03-2000	AU 736282 B2 AU 6420798 A CA 2284271 A1 EP 0983767 A1 JP 10324639 A WO 9842377 A1		26-07-2001 20-10-1998 01-10-1998 08-03-2000 08-12-1998 01-10-1998
EP 1334731	A 13-08-2003	AU 1095202 A CA 2426679 A1 EP 1334731 A1 US 2004028681 A1 CN 1471406 T WO 0234292 A1		06-05-2002 02-05-2002 13-08-2003 12-02-2004 28-01-2004 02-05-2002
EP 1074268	A 07-02-2001	AU 754006 B2 AU 2748199 A CA 2324115 A1 EP 1074268 A1 HU 0101694 A2 NO 20004581 A PL 342938 A1 US 6723319 B1 CN 1297357 T WO 9947170 A1 RU 2195960 C2 US 2004071706 A1		31-10-2002 11-10-1999 23-09-1999 07-02-2001 28-12-2002 10-11-2000 16-07-2001 20-04-2004 30-05-2001 23-09-1999 10-01-2003 15-04-2004
WO 9836061	A 20-08-1998	AU 6220398 A WO 9836061 A2		08-09-1998 20-08-1998
US 5856135	A 05-01-1999	AU 6808194 A WO 9428159 A1 JP 7046998 A TW 458985 B US 6121423 A ZA 9403778 A		20-12-1994 08-12-1994 21-02-1995 11-10-2001 19-09-2000 21-02-1995
EP 0617126	A 28-09-1994	JP 3525221 B2 JP 6237772 A AT 255635 T DE 69433371 D1 EP 0617126 A2 US 5639455 A		10-05-2004 30-08-1994 15-12-2003 15-01-2004 28-09-1994 17-06-1997
US 2001001663	A1 24-05-2001	US 5888510 A AU 1640899 A AU 700819 B2 AU 2630395 A CA 2201781 A1 CZ 9701034 A3 EP 0783893 A1 FI 971404 A		30-03-1999 29-04-1999 14-01-1999 02-05-1996 18-04-1996 13-08-1997 16-07-1997 03-06-1997

INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern

l Application No

PCT/EP2004/010584

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2001001663	A1	HU 77036 A2 WO 9611020 A1 JP 3067987 B2 JP 8208514 A NO 971546 A PL 319574 A1 RU 2147443 C1	02-03-1998 18-04-1996 24-07-2000 13-08-1996 04-06-1997 18-08-1997 20-04-2000
US 5888510	A 30-03-1999	JP 7188056 A US 2001001663 A1 JP 7165608 A AU 1640899 A AU 700819 B2 AU 2630395 A CA 2201781 A1 CZ 9701034 A3 EP 0783893 A1 FI 971404 A HU 77036 A2 WO 9611020 A1 JP 3067987 B2 JP 8208514 A NO 971546 A PL 319574 A1 RU 2147443 C1	25-07-1995 24-05-2001 27-06-1995 29-04-1999 14-01-1999 02-05-1996 18-04-1996 13-08-1997 16-07-1997 03-06-1997 02-03-1998 18-04-1996 24-07-2000 13-08-1996 04-06-1997 18-08-1997 20-04-2000